AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Original) A method of assigning a handover parameter to a cell (20; 40) in a cellular communications system (1), comprising the steps of:

-    classifying cells (10-70) of said communications system (1) into multiple handover-related classes based on radio coverage characteristics of said cells (10-70), each handover-related class being associated with a unique handover parameter;

-    determining to which handover-related class said cell (20; 40) is associated; and

-    assigning, to said cell (20; 40), the handover parameter associated with said determined handover-related class.

2.   (Original) A method of triggering a handover-related procedure for user equipment (200) in a cellular communications system (1), comprising the steps of:

-    classifying cells (10-70) of said communications system (1) into multiple handover-related classes based on radio coverage characteristics associated with said cells (10-70);

-    assigning, for each handover-related class, a unique handover parameter;

-    generating a handover triggering command based on measured signal quality for a communications link between said user equipment (200) and a base station (85; 95)

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of a cell (20; 40) and on an assigned handover parameter associated with the handover-related class of said cell (20; 40); and

- transmitting said handover triggering command to said user equipment (200), said handover triggering command allowing said user equipment (200) to perform said handover-related procedure involving said cell (20; 40).

3. (Original) A method for modifying a list of connected cells for user equipment (200) in a cellular communications system (1), comprising the steps of:

- measuring signal quality for a communications link between said user equipment (200) and a base station (85; 95) of a cell (20; 40);

- receiving a handover parameter for said cell (20; 40), said handover parameter being determined based on the radio coverage characteristics of said cell (20; 40); and

- modifying said list based on measured signal quality and said received handover parameter.

4. (Original) The method according to claim 3, further comprising the steps of:

- classifying cells (10-70) of said communications system (1) into multiple handover-related classes based on radio coverage characteristics of said cells (10-70);

- assigning, for each handover-related class, a unique handover parameter; and

- determining to which handover-related class said cell (20; 40) is associated.

5.   (Currently Amended) The method according to claim 3 ~~or 4~~, further comprising the steps of:

-      measuring signal quality for a communications link between said user equipment (200) and a base station (85) of a current best serving cell (10) to which said user equipment (200) is connected; and

-      generating a list update request based on a comparison between said measured signal quality of said current cell (10), said measured signal quality of said cell (20; 40) and said handover parameter.

6.   (Original) The method according to claim 5, wherein said modifying step comprises the steps of:

-      receiving a list update command generated based on said list update request; and

-      updating said list based on said received list update command.

7.   (Currently Amended) The method according to claim 5 ~~or 6~~, wherein said request generating step comprises generating a cell add request if said signal quality of said cell (20; 40) is larger than said signal quality of said current cell (10) subtracted by said handover parameter.

8.   (Currently Amended) The method according to <u>claim 5</u> ~~any of the claims 5 to 7~~, wherein said request generating step comprises generating a cell delete request if said

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signal quality of said cell (20; 40) is smaller than said signal quality of said current cell (10) subtracted by said handover parameter.

9.   (Original) The method according to claim 2, wherein said generating step comprises the steps of:

-    receiving a handover-triggering request from said user equipment (200), said request being generated based on said measured signal quality of said cell (20; 40), said handover parameter and measured signal quality for a communications link between said user equipment (200) and a base station (85) of a current best serving cell (10) to which said user equipment (200) is connected; and

-    generating said handover triggering command based on said request.

10.   (Currently Amended) The method according to claim 2 or 4, wherein said multiple handover-related classes comprise a first handover-related class and a second handover-related class.

11.   (Original) The method according to claim 10, wherein said first and second classes are selected from at least one of:

-    said first class comprises cells (20, 30) of a same site (80) as a current best serving cell (10) to which said user equipment (200) is connected and said second class comprises cells (40) of other sites (90);

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- said first class comprises neighboring cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises non-neighboring cells of said same site (80) and cells (40) of other sites (90);

- said first class comprises micro and pico cells (70) and said second class comprises macro cells (50, 60); and

- said first class comprises high-sectored cells (80, 90) and said second class comprises low-sectored and non-sectored cells (50-70).

12.   (Original) The method according to claim 1, wherein said multiple handover-related classes comprise a first handover-related class and a second handover-related class and said communications system (1) comprises user equipment (200) connected to a current best serving cell (10), said first and second handover-related classes are selected from at least one of:

- said first class comprises cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises cells (40) of other sites (90);

- said first class comprises neighboring cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises non-neighboring cells of said same site and cells (40) of other sites (90);

- said first class comprises micro and pico cells (70) and said second class comprises macro cells (50, 60); and

- said first class comprises high-sectored cells (80, 90) and said second class comprises low-sectored and non-sectored cells (50-70).

13.   (Currently Amended) The method according to <u>claim 10</u> ~~any of the claims 10 to 12~~, wherein a handover parameter of said first class is larger than a handover parameter of said second class.

14.   (Original) The method according to claim 1, further comprising the steps of:

-       determining communications traffic statistics for said cellular communications system (1); and

-       re-classifying said cells (10-70) of said communications system (1) based on said radio coverage characteristics of said cells (10-70) and said determined communications traffic statistics.

15.   (Currently Amended) The method according to claim 1 ~~or 2~~, wherein a handover-related class is associated with a unique set of multiple handover parameters.

16.   (Currently Amended) The method according to <u>claim 1</u> ~~any of the claims 1 to 15~~, wherein said handover parameter affects a possible handover region for said cell (20; 40).

17.   (Original) A system (100) for assigning a handover parameter to a cell (20; 40) in a cellular communications system (1), said system (100) comprising:

-       means (120) for classifying cells (10-70) of said communications system (1) into multiple handover-related classes based on radio coverage characteristics of said

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cells (10-70), each handover-related class being associated with a unique handover parameter;

- means (130), connected to said classifying means (120), for determining to which handover-related class said cell (20; 40) is associated; and

- means (160), connected to said determining means (130), for assigning, to said cell (20; 40), the handover parameter associated with said determined handover-related class.

18. (Original) The system according to claim 17, wherein said assigning means (160) is configured for assigning a unique set of multiple handover parameters to each handover-related class.

19. (Currently Amended) The system according to claim 17 ~~or 18~~, wherein said classifying means (120) is configured for re-classifying said cells (10-70) of said communications system (1) based on radio coverage characteristics of said cells (10-70) and communications traffic statistics for said communications system (1).

20. (Currently Amended) The system according to <u>claim 17</u> ~~any of the claims 17 to 19~~, wherein said classifying means (120) is configured for classifying said cells (10-70) into a first handover-related class and a second handover-related class and said communications system (1) comprises user equipment (200) connected to a current best

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serving cell (10), said first and second handover-related classes are selected from at least one of:

- said first class comprises cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises cells (40) of other cells (90);

- said first class comprises neighboring cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises non-neighboring cells of said same site and cells (40) of other sites (90);

- said first class comprises micro and pico cells (70) and said second class comprises macro cells (50, 60); and

- said first class comprises high-sectored cells (80, 90) and said second class comprises low-sectored and non-sectored cells (50-70).

21. (Original) The system according to claim 20, wherein said assigning means (160) is configured for assigning a larger handover parameter for said first class than for said second class.

22. (Original) A system (100) for triggering a handover-related procedure for user equipment (200) in a cellular communications system (1), said system (100) comprising:

- means (120) for classifying cells (10-70) of said communications system (1) into multiple handover-related classes based on radio coverage characteristics of said cells (10-70),

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- means (160) for assigning, for each handover-related class, a unique handover parameter;

- means (140) for generating a handover triggering command based on measured signal quality for a communications link between said user equipment (200) and a base station (85; 95) of a cell (20; 40) and a handover parameter associated with the handover-related class of said cell (20; 40); and

- means (110) for transmitting said handover triggering command to said user equipment (200), said handover triggering command allowing said user equipment (200) to perform said handover-related procedure involving said cell (20; 40).

23. (Original) The system according to claim 22, further comprising means (110) for receiving a handover-triggering request from said user equipment (200), said request being generated based on said measured signal quality of said cell (20; 40), said handover parameter and measured signal quality for a communications link between said user equipment (200) and a base station (85) of a current best serving cell (10) to which said user equipment (200) is connected, and said generating means (140) is configured for generating said handover triggering command based on said request.

24. (Currently Amended) The system according to claim 22 or 23, wherein cells (10-70) of said communications systems (1) are classified into a first handover-related class and a second handover-related class, each of said first and second handover-related class being associated with a unique handover parameter.

25. (Original) The system according to claim 24, wherein said first and second classes are selected from at least one of:

- said first class comprises cells (20, 30) of a same site (80) as a current best serving cell (10) to which said user equipment (200) is connected and said second class comprises cells (40) of other sites (90);

- said first class comprises neighboring cells (20, 30) of a same site (80) as said current cell (10) and said second class comprises non-neighboring cells of said same site (80) and cells (40) of other sites (90);

- said first class comprises micro and pico cells (70) and said second class comprises macro cells (50, 60); and

- said first class comprises high-sectored cells (80, 90) and said second class comprises low-sectored and non-sectored cells (50-70).

26. (Currently Amended) The system according to <u>claim 17</u> ~~any of the claims 17 to 25~~, wherein said handover parameter affects a possible handover region for said cell (20; 40).

27. (Currently Amended) The system according to <u>claim 17</u> ~~any of the claims 17 to 26~~, wherein said system (100) is provided in a radio network controlling node in said communications system (1).

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28. (Original) A unit for modifying a list of connected cells for user equipment (200) in a cellular communications system (1), said unit comprising:

- means (220) for measuring signal quality for a communications link between said user equipment (200) and a base station (85; 95) of a cell (20; 40);

- means (210) for receiving a handover parameter for said cell (20; 40), said handover parameter being determined based on the radio coverage characteristics of said cell (20; 40); and

- means (240), connected to said measuring means (220) and said receiving means (210), for modifying said list based on measured signal quality and said received handover parameter.

29. (Original) The unit according to claim 28, wherein cells (10-70) of said communications system (1) are classified into multiple handover-related classed based on radio coverage characteristics of said cells (10-70) and each handover-related class being associated with a unique handover parameter.

30. (Currently Amended) The unit according to claim 28 or 29, wherein said measuring means (220) is configured for measuring signal quality for a communications link between said user equipment (200) and a base station (85) of a current best serving cell (10) to which said user equipment (200) is connected, and said unit further comprising means (230) for generating a list update request based on a comparison between said measured

signal quality of said current cell (10), said measured signal quality of said cell (20; 40) and said handover parameter.

31.   (Original) The unit according to claim 30, further comprising means (210) for receiving a list update command generated based on said list update request, and said modifying means (240) being configured for updating said list based on said received list update command.

32.   (Currently Amended) The unit according to claim 30 or 31, wherein said generating means (230) comprises means (234) for generating a cell add request if said generating means (230) finds that said signal quality of said cell (20; 40) is larger than said signal quality of said current cell (10) subtracted by said handover parameter.

33.   (Currently Amended) The unit according to <u>claim 30</u> any of the claims 30 to 32, wherein said generating means (230) comprises means (236) for generating a cell delete request if said generating means (230) finds that said signal quality of said cell (20; 40) is smaller than said signal quality of said current cell (10) subtracted by said handover parameter.

34.   (Original) The unit according to claim 29, wherein cells (10-70) of said communications systems (1) are classified into a first handover-related class and a second

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handover-related class, each of said first and second handover-related class being

associated with a unique handover parameter.

35.   (Original) The unit according to claim 34, wherein said first and second classes are

selected from at least one of:

-        said first class comprises cells (20, 30) of a same site (80) as a current best

serving cell (10) to which said user equipment (200) is connected and said second class

comprises cells (40) of other sites (90);

-        said first class comprises neighboring cells (20, 30) of a same site (80) as said

current cell (10) and said second class comprises non-neighboring cells of said same site

(80) and cells (40) of other sites (90);

-        said first class comprises micro and pico cells (70) and said second class

comprises macro cells (50, 60); and

-        said first class comprises high-sectored cells (80, 90) and said second class

comprises low-sectored and non-sectored cells (50-70).

36.   (Currently Amended) The unit according to <u>claim 28</u> ~~any of the claims 28 to 35~~,

wherein said handover parameter affects a possible handover region for said cell (20; 40).

37.   (Currently Amended) The unit according to <u>claim 28</u> ~~any of the claims 28 to 36~~,

wherein said unit is provided in said user equipment (200).